



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,213	06/21/2000	Jeom Jae Kim	8733.20105	8092

30827 7590 11/19/2002

MCKENNA LONG & ALDRIDGE LLP
1900 K STREET, NW
WASHINGTON, DC 20006

EXAMINER

QI, ZHI QIANG

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/598,213

Applicant(s)

KIM ET AL.

Examiner

Mike Qi

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 6,8,17,18,21,31,37,39 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7,9-16,19,20,22-30,32-36,38,40,42 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, recitation "a common-auxiliary electrode comprising at least one electrode in the each pixel region" is indefinite. Because the common-auxiliary electrode itself is an electrode, so that the electrode must comprises an electrode. For examination purpose, it is interpreted as the pixel region having a common-auxiliary electrode.

Claims 2-4, recitation "the common-auxiliary electrode has first connecting parts which connect to a common-auxiliary electrode in a pixel region neighboring the pixel region in the first direction", "the first connecting parts have second connecting parts which connect to a common-auxiliary electrode in a pixel region neighboring the pixel region in the second direction" and "the common-auxiliary electrode has protrusions crossing the first connecting parts" are indefinite. Because the common-auxiliary electrode has first connecting parts and the first connecting parts have second connecting parts that all of the first and second connecting parts are the parts of the common-auxiliary electrode, so that the parts of the common-auxiliary electrode must be connected to the common-auxiliary electrode. The first connecting parts extend in

Art Unit: 2871

the first direction (X direction) and the second parts extend in the second direction (Y direction) that is described as the common-auxiliary electrode surrounding the pixel region, so that the protrusions crossing the first connecting parts must be the second connecting parts. For examination purpose, it is interpreted as the common-auxiliary electrode surrounding the pixel region.

Double Patenting

3. Claims 1-5, 7, 9-16, 19-20, 22-30, 32-36, 38, 40, 42-43 of this application conflict with claims 1-5, 8-9, 11-19, 21-25, 27, 29, 31-32 of Application No. 09256180. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Claims 1-4, all the limitations are covered by the claim 1 of the application 09256180. The common-auxiliary electrode as the explanation above that is the common-auxiliary electrode surrounding the pixel region as claimed in the application 09256180.

Claim 5, the limitation " pixel electrode overlaps the common-auxiliary electrode" is the same as the claim 4 of the application 09256180.

Claim 7, the limitation “a storage electrode overlapping the gate bus line” is covered by the claim 2 of the application 09256180.

Claim 9, the limitation “a storage electrode overlapping a common-auxiliary electrode” is covered in claim 3 of the application 09256180.

Claim 10, the limitation “pixel region is divided into at least two portions, liquid crystal molecules in the liquid crystal layer in each portion being driven differently from each other” is the same as the claim 24 of the application 09256180.

Claim 11, the limitation “alignment layer is divided into at least two portions, liquid crystal molecules in the liquid crystal layer in each portion being aligned differently from each other” is the same as the claim 25 of the application 09256180.

Claim 12, all the limitations are covered by the claims 1 and 2 of the application 09256180.

Claim 13, the limitation “n-line thin film transistor positioned at a crossing area of the data bus line and the gate bus line” are covered by claim 34 of the application 09256180.

Claim 14, the limitation “a storage electrode connecting the pixel electrode and overlapping the common-auxiliary electrode” is the same as the claim 3 of the application 09256180.

Claim 15-16, the limitations “ pixel electrode overlaps the common-auxiliary electrode” and “light shielding layer overlaps the common-auxiliary electrode” are the same as the claims 4-5 of the application 09256180.

Art Unit: 2871

Claim 19, the limitation "gate insulator and passivation layer are formed in an area except the common-auxiliary electrode" is the same as claim 8 of the application 09256180.

Claim 20, the limitation "common-auxiliary electrode is electrically connected to the common electrode" is the same as claim 9 of the application 09256180.

Claim 22, the limitation "dielectric frame for distorting electric field on the common electrode" is the same as claim 11 of the application 09256180.

Claim 23, the limitation "pixel electrode has a window inducing electric field therein is the same as claim 12 of the application 09256180.

Claim 24, the limitation "passivation layer has a window inducing electric field therein is the same as claim 13 of the application 09256180.

Claim 25, the limitation "gate insulator has a window inducing electric field therein is the same as claim 14 of the application 09256180.

Claim 26, the limitation "common electrode has a window inducing electric field therein is the same as claim 15 of the application 09256180.

Claim 27, the limitation "color filter layer has a window inducing electric field therein is the same as claim 16 of the application 09256180.

Claims 28-29, the limitation "over coat layer on the color filter layer" and "over coat layer has a window" are the same as claims 17-18 of the application 09256180.

Claim 30, the limitation "the material of the passivation layer" is the same as claim 19 of the application 09256180.

Claim 32, the limitation “the material of the common-auxiliary electrode” is the same as claim 21 of the application 09256180.

Claim 33, the limitation “the material of the pixel electrode” is the same as claim 22 of the application 09256180.

Claim 34, the limitation “the material of the common electrode” is the same as claim 23 of the application 09256180.

Claim 35, the limitation “pixel region is divided into at least two portions, liquid crystal molecules in the liquid crystal layer in each portion being driven differently from each other” is the same as the claim 24 of the application 09256180.

Claims 36 and 38, the limitation “alignment layer is divided into at least two portions, liquid crystal molecules in the liquid crystal layer in each portion being aligned differently from each other” and “at least two portions of the alignment layer are non-alignment treated” are the same as the claims 25 and 27 of the application 09256180.

Claim 40, the limitation “liquid crystal molecules having negative dielectric anisotropy” is the same as claim 29 of the application 09256180.

Claim 42, the limitation “a negative biaxial film on at least one substrate” is the same as claim 31 of the application 09256180.


Claim 43, the limitation “liquid crystal layer includes chiral dopants” is the same as claim 32 of the application 09256180.

Art Unit: 2871

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
5. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Mike Qi
November 8, 2002


ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000